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search results 09/081969

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| L Number | Hits | Search Text | DB | Time stamp |
|---|---|---|---|---|
| 1 | 109 | Hallenbeck.in. | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/06 15:08 |
| 2 | 2 | Hallenbeck.in. and e2f | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/06 15:08 |
| 3 | 2 | (e2f or E2F-1 or dihyrofolate adj reductase or DHFR or DNA adj polymerase adj A or DPA or c-myc or c adj myc or B-myb or B adj myb) adj5 (promoter) same ITR and (termination or polyadenylation or "poly(A)" or poly adj A) and (adenoviral or adenovirus or viral) and cancer | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/06 15:26 |
| 5 | 173 | (e2f or E2F-1 or dihyrofolate adj reductase or DHFR or DNA adj polymerase adj A or DPA or c-myc or c adj myc or B-myb or B adj myb) and (promoter) same ITR and (termination or polyadenylation or "poly(A)" or poly adj A) and (adenoviral or adenovirus) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/06 15:31 |
| 4 | 3 | (e2f or E2F-1 or dihyrofolate adj reductase or DHFR or DNA adj polymerase adj A or DPA or c-myc or c adj myc or B-myb or B adj myb) adj5 (promoter) same ITR and (termination or polyadenylation or "poly(A)" or poly adj A) and (adenoviral or adenovirus) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/06 15:30 |
| 6 | 42 | (e2f or E2F-1 or dihyrofolate adj reductase or DHFR or DNA adj polymerase adj A or DPA or c-myc or c adj myc or B-myb or B adj myb) and (promoter) same ITR same (termination or polyadenylation or "poly(A)" or poly adj A) and (adenoviral or adenovirus) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/06 15:37 |
| 7 | 12 | oncolytic adj5 vector | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/06 16:48 |
| 8 | 26 | (e2f or E2F-1 or dihyrofolate adj reductase or DHFR or DNA adj polymerase adj A or DPA or c-myc or c adj myc or B-myb or B adj myb) and (promoter) same ITR same (termination or polyadenylation or "poly(A)" or poly adj A) same (e1a or e1b or e4 or e2 or replication) and (adenoviral or adenovirus) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/06 16:31 |
| 9 | 1 | ((e2f or E2F-1 or dihyrofolate adj reductase or DHFR or DNA adj polymerase adj A or DPA or c-myc or c adj myc or B-myb or B adj myb) and (promoter) same ITR same (termination or polyadenylation or "poly(A)" or poly adj A) same (e1a or e1b or e4 or e2 or replication) and (adenoviral or adenovirus)) and (oncolytic adj5 vector) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/06 16:29 |
| 10 | 23 | (e2f or E2F-1 or dihyrofolate adj reductase or DHFR or DNA adj polymerase adj A or DPA or c-myc or c adj myc or B-myb or B adj myb) and (promoter) same ITR same (termination or polyadenylation or "poly(A)" or poly adj A) same (e1a or e1b or e4 or e2 or replication) same (adenoviral or adenovirus) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/06 16:34 |

| | | | | |
|---|---|---|---|---|
| 11 | 10 | oncolytic and E2f | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/06 16:49 |
| 12 | 3 | oncolytic and E2f and polyadenylation | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/06 16:49 |
| - | 2 | "10081969" | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/06 15:08 |
| - | 4255 | (adenoviral or adenovirus) adj vector | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/05 15:14 |
| - | 12590 | (adenoviral or adenovirus or viral) adj vector | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/05 16:19 |
| - | 51 | oncolytic and ((adenoviral or adenovirus or viral) adj vector) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/05 16:20 |
| - | 8 | e2f and (oncolytic and ((adenoviral or adenovirus or viral) adj vector)) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/05 16:20 |
| - | 349 | e2f and ((adenoviral or adenovirus or viral) adj vector) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/05 16:20 |
| - | 51 | (e2f adj5 promoter) and ((adenoviral or adenovirus or viral) adj vector) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/05 16:21 |
| - | 1 | (e2f adj5 promoter) same (termination or polyadenylation) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/05 16:26 |
| - | 20 | (e2f or E2F-1 or dihyrofolate adj reductase or DHFR or DNA adj polymerase adj A or DPA or c-myc or c adj myc or B-myb or B adj myb) adj2 (promoter) same (termination or polyadenylation) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/05 16:43 |
| - | 97 | (e2f or E2F-1 or dihyrofolate adj reductase or DHFR or DNA adj polymerase adj A or DPA or c-myc or c adj myc or B-myb or B adj myb) adj2 (promoter) and (termination or polyadenylation) and ((adenoviral or adenovirus or viral) adj vector) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/05 16:51 |
| - | 147 | (e2f or E2F-1 or dihyrofolate adj reductase or DHFR or DNA adj polymerase adj A or DPA or c-myc or c adj myc or B-myb or B adj myb) adj2 (promoter) and (termination or polyadenylation or poly(A) or poly adj A) and ((adenoviral or adenovirus or viral) adj vector) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/05 16:50 |

| | | | | |
|---|---|---|---|---|
| - | 51 | (e2f or E2F-1 or dihyrofolate adj reductase or DHFR or DNA adj polymerase adj A or DPA or c-myc or c adj myc or B-myb or B adj myb) adj2 (promoter) same (termination or polyadenylation or poly(A) or poly adj A) and ((adenoviral or adenovirus or viral) adj vector) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/05 17:10 |
| - | 38 | ((e2f or E2F-1 or dihyrofolate adj reductase or DHFR or DNA adj polymerase adj A or DPA or c-myc or c adj myc or B-myb or B adj myb) adj2 (promoter) same (termination or polyadenylation or poly(A) or poly adj A) and ((adenoviral or adenovirus or viral) adj vector)) and cancer | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/06 15:18 |
| - | 2 | (e2f or E2F-1 or dihyrofolate adj reductase or DHFR or DNA adj polymerase adj A or DPA or c-myc or c adj myc or B-myb or B adj myb) adj2 (promoter) same (termination or polyadenylation or "poly(A)" or poly adj A) and ((adenoviral or adenovirus or viral) adj vector) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/05 17:14 |
| - | 103 | (e2f or E2F-1 or dihyrofolate adj reductase or DHFR or DNA adj polymerase adj A or DPA or c-myc or c adj myc or B-myb or B adj myb) adj2 (promoter) and (termination or polyadenylation or "poly(A)" or poly adj A) and ((adenoviral or adenovirus or viral) adj vector) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/05 17:18 |
| - | 73 | ((e2f or E2F-1 or dihyrofolate adj reductase or DHFR or DNA adj polymerase adj A or DPA or c-myc or c adj myc or B-myb or B adj myb) adj2 (promoter) and (termination or polyadenylation or "poly(A)" or poly adj A) and ((adenoviral or adenovirus or viral) adj vector)) and cancer | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/05 17:18 |
| - | 1 | (e2f or E2F-1 or dihyrofolate adj reductase or DHFR or DNA adj polymerase adj A or DPA or c-myc or c adj myc or B-myb or B adj myb) adj2 (promoter) same ITR and (termination or polyadenylation or "poly(A)" or poly adj A) and ((adenoviral or adenovirus or viral) adj vector) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/05 17:21 |
| - | 2 | (e2f or E2F-1 or dihyrofolate adj reductase or DHFR or DNA adj polymerase adj A or DPA or c-myc or c adj myc or B-myb or B adj myb) adj2 (promoter) and ITR and (termination or polyadenylation or "poly(A)" or poly adj A) and ((adenoviral or adenovirus or viral) adj vector) and replication adj5 gene | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/05 17:31 |

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 NEWS  3  Apr 09  BEILSTEIN: Reload and Implementation of a New Subject Area
 NEWS  4  Apr 09  ZDB will be removed from STN
 NEWS  5  Apr 19  US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
 NEWS  6  Apr 22  Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
 NEWS  7  Apr 22  BIOSIS Gene Names now available in TOXCENTER
 NEWS  8  Apr 22  Federal Research in Progress (FEDRIP) now available
 NEWS  9  Jun 03  New e-mail delivery for search results now available
 NEWS 10  Jun 10  MEDLINE Reload
 NEWS 11  Jun 10  PCTFULL has been reloaded
 NEWS 12  Jul 02  FOREGE no longer contains STANDARDS file segment
 NEWS 13  Jul 22  USAN to be reloaded July 28, 2002;
                  saved answer sets no longer valid
 NEWS 14  Jul 29  Enhanced polymer searching in REGISTRY
 NEWS 15  Jul 30  NETFIRST to be removed from STN
 NEWS 16  Aug 08  CANCERLIT reload
 NEWS 17  Aug 08  PHARMAMarketLetter(PHARMAML) - new on STN
 NEWS 18  Aug 08  NTIS has been reloaded and enhanced
 NEWS 19  Aug 19  Aquatic Toxicity Information Retrieval (AQUIRE)
                  now available on STN
 NEWS 20  Aug 19  IFIPAT, IFICDB, and IFIUDB have been reloaded
 NEWS 21  Aug 19  The MEDLINE file segment of TOXCENTER has been reloaded
 NEWS 22  Aug 26  Sequence searching in REGISTRY enhanced
 NEWS 23  Sep 03  JAPIO has been reloaded and enhanced
 NEWS 24  Sep 16  Experimental properties added to the REGISTRY file
 NEWS 25  Sep 16  CA Section Thesaurus available in CAPLUS and CA
 NEWS 26  Oct 01  CASREACT Enriched with Reactions from 1907 to 1985
 NEWS 27  Oct 21  EVENTLINE has been reloaded
 NEWS 28  Oct 24  BEILSTEIN adds new search fields
 NEWS 29  Oct 24  Nutraceuticals International (NUTRACEUT) now available on STN
 NEWS 30  Oct 25  MEDLINE SDI run of October 8, 2002
 NEWS 31  Nov 18  DKILIT has been renamed APOLLIT
 NEWS 32  Nov 25  More calculated properties added to REGISTRY
 NEWS 33  Dec 02  TIBKAT will be removed from STN
 NEWS 34  Dec 04  CSA files on STN
 NEWS 35  Dec 17  PCTFULL now covers WP/PCT Applications from 1978 to date
 NEWS 36  Dec 17  TOXCENTER enhanced with additional content
 NEWS 37  Dec 17  Adis Clinical Trials Insight now available on STN
 NEWS 38  Dec 30  ISMEC no longer available
 NEWS 39  Jan 13  Indexing added to some pre-1967 records in CA/CAPLUS
 NEWS 40  Jan 21  NUTRACEUT offering one free connect hour in February 2003
 NEWS 41  Jan 21  PHARMAML offering one free connect hour in February 2003
 NEWS 42  Jan 29  Simultaneous left and right truncation added to COMPENDEX,
                  ENERGY, INSPEC
 NEWS 43  Feb 13  CANCERLIT is no longer being updated
 NEWS 44  Feb 24  METADEX enhancements
 NEWS 45  Feb 24  PCTGEN now available on STN
 NEWS 46  Feb 24  TEMA now available on STN
 NEWS 47  Feb 26  NTIS now allows simultaneous left and right truncation
 NEWS 48  Feb 26  PCTFULL now contains images
 NEWS 49  Mar 04  SDI PACKAGE for monthly delivery of multifile SDI results

 NEWS EXPRESS  January 6 CURRENT WINDOWS VERSION IS V6.01a,
               CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
               AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
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=> s adenovirus and (promoter (A5) ITR (a5) (polyadenylation or polyA or "poly(A)" or termination)) and (e2f or DHFR or DPA or c-myc or B-myb)
MISSING OPERATOR 'PROMOTER (A5'
The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> s adenovirus and (promoter (s) ITR (s) (polyadenylation or polyA or "poly(A)" or termination)) and (e2f or DHFR or DPA or c-myc or B-myb)
L1 2 ADENOVIRUS AND (PROMOTER (S) ITR (S) (POLYADENYLATION OR POLYA OR "POLY(A)" OR TERMINATION)) AND (E2F OR DHFR OR DPA OR C-MYC OR B-MYB)

=> d ibib abs 1-2

L1 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:676177 CAPLUS
DOCUMENT NUMBER: 137:211937
TITLE: Construction of adenoviral vectors containing insulating sequence for minimization of leaky therapeutic gene expression
INVENTOR(S): Gorziglia, Mario; Hallenbeck, Paul L.; Kaleko, Michael; Clarke, Lori; Phipps, Sandrina
PATENT ASSIGNEE(S): Novartis A.-G., Switz.
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2002068627 | A2 | 20020906 | WO 2002-US5280 | 20020222 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-270885P P 20010223
AB The present invention relates to adenoviral vectors and their use in methods of gene therapy. The present invention provides novel viral vectors and methods useful for the minimization of leaky gene expression, and, in particular, of nonspecific transcriptional read-through of genes.

Such constructs may be obtained by the insertion of an insulating sequence into a vector construct, such as for example a termination signal sequence upstream of the transcription initiation site of the resp. transcription unit. Provided is a recombinant viral vector comprising an adenoviral nucleic acid backbone, wherein said nucleic acid backbone comprises in sequential order: a left **ITR**, a **termination** signal sequence, an **E2F**-1 **promoter** which is operably linked to a gene essential for replication of the recombinant viral vector, an adenoviral packaging signal, and a right **ITR**.

L1 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:675779 CAPLUS
DOCUMENT NUMBER: 137:210924
TITLE: Oncolytic adenoviral vectors expressing therapeutic genes for the treatment of cancer
INVENTOR(S): Ennist, David Leonard; Forry-Schaudies, Suzanne; Gorziglia, Mario; Hallenbeck, Paul L.; Hay, Carl M.; Jakubczak, John Leonard; Kaleko, Michael; Ryan, Patricia Clara; Stewart, David A.; Xie, Yuefeng; Connelly, Sheila; Police, Sehidhar Reddy; Clarke, Lori; Phipps, Sandrina; Cheng, Cheng
PATENT ASSIGNEE(S): Novartis Pharma A.-G., Switz.
SOURCE: PCT Int. Appl., 226 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2002067861 | A2 | 20020906 | WO 2002-US5300 | 20020222 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-270922P P 20010223
US 2001-295037P P 20010601
US 2002-348670P P 20020114

AB The present invention relates to oncolytic adenoviral vectors and their use in methods of gene therapy. Provided is a recombinant viral vector comprising an adenoviral nucleic acid backbone, wherein said nucleic acid backbone comprises in sequential order: a left **ITR**, a **termination** signal sequence, an **E2F** responsive **promoter** which is operably linked to a gene essential for replication of the recombinant viral vector, an adenoviral packaging signal, and a right **ITR**. The adenoviral vectors may also comprise a polynucleotide encoding a cytokine such as GM-CSF that can stimulate a systemic immune response against tumor cells. The preferred vector Ar6pAE2fF comprises an **adenovirus** vector that uses a fragment of the human **E2F**-1 promoter to selectively regulate E1A expression and thus adenoviral replication in tumor cells. Ar6pAE2fF selectively kills Rb-pathway defective tumor cells over normal primary cells, and is preferentially replicated in human tumor cell lines vs. normal primary cells. This vector has a superior early toxicity profile to the non-selective replication competent virus, Addl327, when administered i.v. in SCID mice and provides advantages in efficacy, selectivity, and safety as compared to the oncolytic viral vector Addl1520. Ar17pAE2fTrtex is a particularly preferred, tumor-selective oncolytic **adenovirus** designed for the treatment of a broad range of cancer indications involving the two most common alterations in human cancer, namely defects in the Rb-pathway and overexpression of telomerase. Ar17pAE2fTrtex utilizes a **E2F**-1 promoter to control expression of the adenoviral E1A gene and the adenoviral E4 gene is controlled by a hTERT (human telomerase reverse transcriptase) promoter. Ar17pAE2fTrtex is expected to replicate in the majority of cancer cells, lead to tumor selective expression of toxic viral proteins, cytolysis, and enhancement of sensitivity to chemotherapy, cytokines, and cytotoxic T lymphocytes.

=> FIL STNGUIDE

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
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L1            2 S ADENOVIRUS AND (PROMOTER (S) ITR (S) (POLYADENYLATION OR POLY

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     FILE 'MEDLINE, CAPLUS' ENTERED AT 17:01:16 ON 06 MAR 2003

=> s adenovirus and (promoter (s) ITR (s) (polyadenylation or polyA or "poly(A)" or termination))
L2            8 ADENOVIRUS AND (PROMOTER (S) ITR (S) (POLYADENYLATION OR POLYA
                OR "POLY(A)" OR TERMINATION))

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L3            7 DUP REMOVE L2 (1 DUPLICATE REMOVED)

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L4            5 L3 AND PY<=2001

=> d ibib abs 1-5

L4   ANSWER 1 OF 5     MEDLINE
ACCESSION NUMBER:   1999373450     MEDLINE
DOCUMENT NUMBER:    99373450   PubMed ID: 10441562
TITLE:              Transcription map and expression of bovine herpesvirus-1
                    glycoprotein D in early region 4 of bovine
                    adenovirus-3.
AUTHOR:             Baxi M K; Babiuk L A; Mehtali M; Tikoo S K
CORPORATE SOURCE:   Veterinary Infectious Disease Organization, University of
                    Saskatchewan, Saskatoon, Saskatchewan, S7N 5E3, Canada.
SOURCE:             VIROLOGY, (1999 Aug 15) 261 (1) 143-52.
                    Journal code: 0110674. ISSN: 0042-6822.
PUB. COUNTRY:       United States
DOCUMENT TYPE:      Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:           English
FILE SEGMENT:       Priority Journals
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ENTRY MONTH: 199909
ENTRY DATE: Entered STN: 19990925
Last Updated on STN: 19990925
Entered Medline: 19990907

AB Early region 4 (E4) of bovine **adenovirus** type 3 (BAV-3) was analyzed by Northern blotting, RT-PCR analysis, cDNA sequencing, and S1 nuclease protection assays. The transcriptional map of the E4 region of BAV-3 has marked dissimilarities from those of mouse **adenovirus** -1, ovine **adenovirus**-287, and human **adenovirus**-2, for which the transcriptional maps have been constructed. The E4 region of BAV-3, located between 98.6 and 89.8 MU transcribes seven distinct classes of bovine **adenovirus** type 3 mRNA. The seven mRNA species formed by the removal of one to three introns share both the 3' end and a short 5' leader (25 nucleotides). The E4 mRNAs can encode at least five unique polypeptides, namely, 143R1, 69R, 143R2, 268R, and 219R. Isolation of a replication-competent recombinant "BAV404" containing 1.9-kb insertion [glycoprotein (gD) of bovine herpesvirus 1, under the control of a SV40 early **promoter** and **poly**(A)] in the region between E4 and the right **ITR** suggested that this region is nonessential for BAV-3 replication. Expression of gD by BAV404 recombinant virus was confirmed by immunoprecipitation with gD-specific monoclonal antibodies. Analysis of the kinetics of protein expression indicated that gD is expressed at both early and late times postinfection. These results suggest that: (a) E4 produces seven 5'-3' coterminal mRNAs and (b) the right terminal region of BAV-3 can be used for the expression of vaccine antigens.


L4 ANSWER 2 OF 5 MEDLINE
ACCESSION NUMBER: 90223999 MEDLINE
DOCUMENT NUMBER: 90223999 PubMed ID: 2183470
TITLE: High level expression of the envelope glycoproteins of the human immunodeficiency virus type I in presence of rev gene using helper-independent **adenovirus** type 7 recombinants.
AUTHOR: Chanda P K; Natuk R J; Mason B B; Bhat B M; Greenberg L; Dheer S K; Molnar-Kimber K L; Mizutani S; Lubeck M D; Davis A R; +
CORPORATE SOURCE: Biotechnology and Microbiology Division, Wyeth-Ayerst Research, Philadelphia, Pennsylvania 19101.
SOURCE: VIROLOGY, (**1990 Apr**) 175 (2) 535-47.
Journal code: 0110674. ISSN: 0042-6822.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; AIDS
ENTRY MONTH: 199005
ENTRY DATE: Entered STN: 19900622
Last Updated on STN: 19970203
Entered Medline: 19900523

AB The effect of rev (art/trs) gene on the level of HIV-1 envelope (env) expression using recombinant **adenovirus** was investigated. Recombinant **adenoviruses** expressing either the envelope or the rev gene of the human immunodeficiency virus type 1 (HIV-1) were constructed by inserting the gene into an expression cassette. The expression cassette contained the **adenovirus** type 7 major late **promoter**, followed by leader 1 of the **adenovirus** tripartite leader and a portion of intron between leaders 1 and 2, leaders 2 and 3, and a hexon **polyadenylation** signal. The cassette was then inserted at the terminal region between the E4 and **ITR** regions of the **adenovirus** 7 genome with a concomitant E3 region deletion (80-87 m.u.). A549 cells infected with the recombinant virus containing the env gene produced the envelope glycoproteins gp160, gp120, and gp41. HIV-1 envelope gene expression was greatly enhanced (20- to 50-fold) in the cells that were simultaneously infected with the recombinant **adenovirus** containing the rev gene as measured by ELISA and Western blotting. Interestingly, this effect was observed despite the lack of the 5' down splice site for rev and seems to be post-transcriptional. Another recombinant **adenovirus** which contains both the rev and the env genes was constructed by inserting the rev gene in the deleted E3 region and the env gene in the terminal cassette. This double recombinant virus expressed high levels of env antigen in A549 cells similar to those attained upon co-infection with two separate recombinant viruses containing the rev or env gene. Furthermore, the rev gene nucleotide sequence could be altered without altering the amino acid sequence and its sequences truncated by 17 amino acids from the C-terminus had no effect of rev function.

L4 ANSWER 3 OF 5 CAPLUS 
ACCESSION NUMBER: 1999:72000 CAPLUS

DOCUMENT NUMBER: 130:135015
TITLE: Cloning vectors for producing adenoviral minimal viruses
INVENTOR(S): Hillgenberg, Moritz; Loser, Peter; Schnieders, Frank; Sandig, Volker; Strauss, Michael
PATENT ASSIGNEE(S): Hepavec A.-G. fur Gentherapie, Germany
SOURCE: PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9902647 | A2 | 19990121 | WO 1998-DE1940 | 19980706 <-- |
| WO 9902647 | A3 | 19990415 | | |
| W: JP, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| DE 19744768 | A1 | 20000803 | DE 1997-19744768 | 19971010 <-- |
| DE 19744768 | C2 | 20020411 | | |
| EP 1003895 | A2 | 20000531 | EP 1998-944984 | 19980706 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE | | | | |
| JP 2001509375 | T2 | 20010724 | JP 2000-502148 | 19980706 <-- |

PRIORITY APPLN. INFO.: DE 1997-19729571 A 19970710
DE 1997-19744768 A 19971010
WO 1998-DE1940 W 19980706

AB The invention relates to cloning vectors for producing adenoviral minimal viruses, consisting of: a) two adenoviral inverted terminal repeats (ITRs) which are flanked by ab) two restriction sites with a recognition sequence more than 8 bp in length, and enclose ac) an adenoviral packaging signal, ad) a multiple cloning site for inserting therapeutic DNA fragments into which non-coding mammalian chromosomal DNA may addnl. be cloned, ae) (optionally) a recognition site for a recombinase situated between one of the ITRs and the adenoviral packaging signal, and af) (optionally) a reporter gene cassette; b) a bacterial plasmid backbone with replication origin and bacterial resistance gene, into which ba) a packaging signal of a bacteriophage is cloned. Thus, minimal adenoviral vector cloning plasmid pMVX-Bg was created. This plasmid consists of an **adenovirus** 5 5'-**ITR**, a human chromosomal stuffer, a Rouse sarcoma virus **promoter** linked to a lacZ gene and an SV40 **polyA** sequence, an **adenovirus** 5 3'-**ITR**, an I-SceI restriction site, an ampR gene, a cos site, and another I-SceI restriction site.

L4 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:605015 CAPLUS
DOCUMENT NUMBER: 129:198915
TITLE: Expression vector for the permanent expression of foreign DNA
INVENTOR(S): Grummt, Ingrid; Grummt, Friedrich
PATENT ASSIGNEE(S): Deutsches Krebsforschungszentrum Stiftung des Offentlichen Rechts, Germany
SOURCE: PCT Int. Appl., 10 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9837209 | A2 | 19980827 | WO 1998-DE539 | 19980224 <-- |
| WO 9837209 | A3 | 19981126 | | |
| W: CA, JP, US | | | | |
| RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| DE 19707273 | C1 | 19980924 | DE 1997-19707273 | 19970224 <-- |
| EP 968296 | A2 | 20000105 | EP 1998-914811 | 19980224 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE | | | | |
| JP 2001512320 | T2 | 20010821 | JP 1998-536164 | 19980224 <-- |
| US 6300126 | B1 | 20011009 | US 1999-367927 | 19991020 <-- |

PRIORITY APPLN. INFO.: DE 1997-19707273 A 19970224
WO 1998-DE539 W 19980224

AB The present invention relates to an expression vector for expressing foreign DNA. Said DNA at its 3' end has a sequence which prevents the replication of the expression vector from occurring in the opposite direction to the transcription of said expression vector. The invention also relates to a prepn. contg. such an expression vector and to the use of both in the permanent expression of foreign DNA in cells. Thus,

expression vector pAAV-ADA, comprising adeno-assocd. virus 5'- and 3'-**ITRs**, mouse metallothionein **promoter**, human adenosine deaminase cDNA, SV40 **poly A** sequence, and a replication fork barrier, was prepd. COS cells infected with **adenovirus** and expressing AAV rep and cap genes were used to prep. virus particles. Infection of cells with these virus particles led to permanent expression of the ADA gene.

L4 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:324646 CAPLUS
DOCUMENT NUMBER: 122:153378
TITLE: Adenoviral vectors containing DNA encoding human lung surfactant protein
INVENTOR(S): Trapnell, Bruce; Whitsett, Jeffrey
PATENT ASSIGNEE(S): Genetic Therapy, Inc., USA; University of Cincinnati
SOURCE: PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
|---|---|---|---|---|---|
| WO 9423582 | A1 | 19941027 | WO 1994-US3831 | 19940407 | <-- |
| W: CA, JP, US | | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | | |
| CA 2160136 | AA | 19941027 | CA 1994-2160136 | 19940407 | <-- |
| EP 701401 | A1 | 19960320 | EP 1994-914075 | 19940407 | <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | | |
| JP 09500782 | T2 | 19970128 | JP 1994-523310 | 19940407 | <-- |

PRIORITY APPLN. INFO.: US 1993-44406 19930408
WO 1994-US3831 19940407

AB Adenoviral vectors contg. a DNA sequence encoding a lung surfactant protein are described. The adenoviral vector may be a replication-deficient adenoviral vector which is free of at least the majority of the E1 and E3 DNA sequences. Thus, the recombinant adenoviral vector AV1SPB1 contg. human surfactant protein B (SPB) cDNA was constructed through homologous recombination between the **adenovirus** 5 deletion mutant Ad-d1327 and plasmid pAVS6SPB#7. Ad-d1327 has a deleted E3 region in which base pairs 28,593-30,470 are absent. Plasmid pAVS6SPB#7 contains an adenoviral 5'-**ITR**, an origin of replication contained completely within the 5'-**ITR**, an E1a enhancer and encapsidation signal, a Rous sarcoma virus **promoter**, and **adenovirus** 5' tripartite leader sequence, and the 2-kb human SPB cDNA including the entire protein coding sequence (nucleotides 1-1172), and the SV40 **poly(A)** signal. Such vectors may be employed for generation of infectious viral particles which may transduce lung epithelial cells in vivo to enable the expression of surfactant protein by such cells. The adenoviral vectors can treat lung surfactant protein deficiency states such as infant respiratory distress syndrome or adult respiratory distress syndrome.

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